

REMARKS

Amendments to the Claims

Upon entry of the present amendments, claims 1-25 are pending.

Claims 1 and 13 are amended to specify more particularly that the layers of the laminate are not bonded (whether by adhesive, by mechanical attachment or by other means); the conductive-foil sources are also characterized as being “one or more.” Support for this amendment is found, *e.g.*, at page 10, in the last sentence of each of the first two paragraphs. Accordingly, the present amendment does not introduce new matter.

New claim 25 is added, specifying that the conductive-foil layers are cut before being covered with dielectric layers. Support for this amendment is found at page 8, line 1, through page 9, line 3. Claim 25 depends from claim 1, and is therefore allowable for the same reasons, discussed below, that render claim 1 allowable.

Each of the grounds for rejection cited in the Office Action is addressed below, under an appropriate sub-heading.

35 U.S.C. §102

Claims 13-16, 18-20, and 24 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent 4,875,283 (Johnston).

Of these claims, claim 13 is independent, and the rest are dependent therefrom. In the process of claim 13, as amended, a dielectric layer is sandwiched between two layers of conductive foil extended from one or more conductive-foil sources. By so inserting the dielectric layer between the conductive-foil layers, surfaces of the conductive-foil layers can be covered and protected almost instantly from the time that they are exposed upon being extended from the foil source. Particular embodiments of this process are illustrated in FIGS. 3, 5 and 6 of the subject patent application, wherein prepreg layers (16) are inserted between copper foil layers [(6 and 10) or (26a and 26b)] that extend from conductive-foil sources in the form of rolls comprising copper foil [(2a and 2b) or (20 and 22)].

Johnston does not disclose a process wherein the conductive-foil layers extend from one or more conductive-foil sources when the dielectric layer is sandwiched therebetween. Rather, Johnston appears to only describe and illustrate conductive foil in the form of separate sheets (unattached to a roll of conductive foil or other source).

Because the conductive foil layers in Johnston do not extend from a conductive-foil source when a dielectric layer is sandwiched therebetween, Johnston does not anticipate claim 13. Accordingly, Applicants request that this ground for rejection be reconsidered and withdrawn.

35 U.S.C. §103(a): Claims 1-4, 6-8 and 12 in view of Johnston:

Claims 1-4, 6-8 and 12 were rejected under 35 U.S.C. §103(a) as being unpatentable over Johnston.

Claim 1 is independent, and the rest of these claims are dependent therefrom. Amended claim 1 specifies that a layer of protective-carrier sheeting is sandwiched between two layers of conductive foil extended from one or more conductive-foil sources. By so inserting the protective-carrier sheeting between the conductive-foil layers, surfaces of the conductive-foil layers can be covered and protected almost instantly from the time that they are exposed from the foil source. Particular embodiments of this process are illustrated in FIGS. 1 and 2 of the subject patent application, wherein aluminum sheeting (8) is inserted between copper foil layers (6 and 10) that extend from conductive-foil sources in the form of rolls of copper foil (2a and 2b).

Johnston does not disclose or suggest a process wherein the conductive-foil layers extend from one or more conductive-foil sources when protective-carrier sheeting is sandwiched therebetween. Rather, Johnston appears to only describe and illustrate conductive foil in the form of separate sheets (unattached to a roll of conductive foil or other source).

Because Johnston does not disclose or suggest sandwiching protective-carrier sheeting between layers of the conductive foil extended from one or more conductive foil sources, Johnston does not render claim 1 obvious. Accordingly, Applicants request that this ground for rejection be reconsidered and withdrawn.

35 U.S.C. §103(a): Claims 5, 9, 11, 17, 21 and 23 in view of Johnston and Fisher *et al.*:

Claims 5, 9, 11, 17, 21 and 23 were rejected under 35 U.S.C. §103(a) as being unpatentable over Johnston, as applied above, and further in view of U.S. Patent 5,942,314 (Fisher *et al.*).

Of these claims, claims 5, 9 and 11 depend from amended claim 1, while claims 17, 21 and 23 depend from amended claim 13. As discussed, above, claims 1 and 13 specify that a layer of protective-carrier sheeting (in claim 1) or a dielectric layer (in claim 13) is sandwiched between two layers of conductive foil extended from one or more conductive-foil sources.

As discussed, above, Johnston is deficient because it fails to disclose or suggest sandwiching either a layer of protective-carrier sheeting or a dielectric layer between two layers of conductive foil extended from one or more conductive foil sources, as specified in claims 1 and 13. Fisher *et al.* discloses ultrasonically bonding a conductive (copper) foil layer to a second metal (aluminum) layer and shearing the bonded layers into panels for subsequent use in making laminates (*see id.*, Col. 5, lines 19-57. Contrary to amended claims 1 and 13, however, the layers in Fisher *et al.* are bonded together, and a dielectric layer or a layer of protective-carrier-sheeting is not sandwiched between the conductive foil layers while the conductive foil layers are extended from their source(s).

Because neither Johnston nor Fisher *et al.*, alone or in combination, disclose or suggest sandwiching an unbonded layer of protective carrier sheeting or an unbonded dielectric layer between the layers of conductive foil while the conductive foil layers extend from one or more sources, these references do not render obvious Applicants' amended claims. Accordingly, reconsideration and withdrawal of this ground for rejection is respectfully requested.

35 U.S.C. §103(a): Claims 9, 10, 21 and 22 in view of Johnston and Nagy:

Claims 9, 10, 21 and 22 were rejected under 35 U.S.C. §103(a) as being unpatentable over Johnston, as applied above, and further in view of U.S. Patent 4,293,617 (Nagy).

Of these claims, claims 9 and 10 depend from amended claim 1, while claims 21 and 22 depend from amended claim 13. As discussed, above, claims 1 and 13 specify that a layer of

protective-carrier sheeting (in claim 1) or a dielectric layer (in claim 13) is sandwiched between two layers of conductive foil extended from one or more conductive-foil sources.

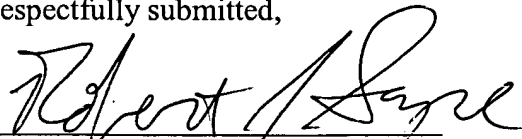
As previously noted, Johnston is deficient because it fails to disclose or suggest sandwiching either a layer of protective-carrier sheeting or a dielectric layer between two layers of conductive foil extended from one or more conductive foil sources, as specified in claims 1 and 13. Nagy likewise fails to disclose or suggest sandwiching either a layer of protective-carrier sheeting or a dielectric layer between two layers of conductive foil extended from one or more conductive foil sources. Furthermore, the copper and aluminum carrier layers in Nagy are "tenaciously bonded" (see, *e.g.*, the abstract of Nagy), contrary to amended claims 1 and 13.

Because neither Johnston nor Nagy, alone or in combination, disclose or suggest sandwiching an unbonded layer of protective carrier sheeting or an unbonded dielectric layer between the layers of conductive foil while the conductive foil layers are extended from one or more sources, these references do not render obvious Applicants' amended claims. Accordingly, reconsideration and withdrawal of this ground for rejection is respectfully requested.

CONCLUSION

For the reasons cited, above, Applicants respectfully submit that the amended claims are novel and non-obvious over the cited references. Accordingly, Applicants respectfully request that a timely notice of Allowance be issued in this case. If there are any questions regarding these amendments and remarks, the Examiner is encouraged to contact the undersigned at the telephone number provided below.

Respectfully submitted,



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